October 26, 1956

Dr. R. E. Strange Microbiological Research Porton, Wilts.

Dear Dr. Strange:

The subject may seem remote from my special interests in bacterial genetics, but I would be grateful to you for reprints on your current work on bacterial walls. We are in fact currently working on the L-forms of E. coli, on the basis of some observations cited in the enclosure. I will be happy to exchange these publications when the reprints have come in.

I understand you have identified the amino-sugar as a 3-lactyl-glucosamine. A compound as important as this clearly desertes a distinctive trivial name; I would offer formyour consideration "phragmose", but hope you can devise one more euphonious.

As part of our present study, we are searching for wall-less mutants of E. coli-- the congeners of Davis' diaminopimelic-less, which forms proto-plasts when deprived of dap in a protective medium. It seems likely that we shall find one which might be defective in the formation of "pheagmose", but the problem will be to maintain and identify such mutants. What would you recommend as the handlest source of crude "phragmose"? Would you be in a position to furnish a small quantitatty of the purified material for specific identification purposes? I realize this may be an inordinate request, but would also propose that such a mutant would be quite valuable for assay purposes.

We are also somewhat strapped for DAP, though we can get along with the filtrates of Davis! lysine mutant. Can you suggest where as much as 1 gm. might be purchased?

If you can offer any further suggestions of components that would be relevant to this mutant hunt, I would be glad to have them.

Yours sincerely,

Joshua Lederberg Professor of Genetics

P.S. Please give my regards to Dt. Powell when she returns. Some of these questions might as well have been addressed to her. I am sorry I was unable to have a longer discussion with her about this when she visited Madison recently.